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SEATBELT ATTACHMENT TO FACILITATE SEATBELT ACCESS

INVENTOR:

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CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to copending provisional patent application
20 60/401,134, filed August 5, 2002 which is incorporated herein.

FIELD OF THE INVENTION

The present invention relates to a one-piece device to aid in acquiring the
seatbelt within a motor vehicle.

BACKGROUND OF THE INVENTION

Most seatbelts in modern motor vehicles are located behind the window and can be adjusted up or down for driver or passenger comfort, but not forward and backward. If the belt is needed to be placed at its lowest position, it probably
5 also needs to be pushed forward for a short person. Many laws govern seatbelt manufactures for safety reasons, and therefore a compromise is difficult to achieve that satisfies both the consumer and the safety laws. However after market rules and regulations allow the consumer to add accessories to the vehicle without modifying the components or affecting safety.

10 The device developed herein is an accessory device that can be easily attached to the already existing seatbelt and does not change the function of the preexisting seatbelt. Located directly above the shoulder belt buckle, this device enables a short-legged person to reach the seatbelt more easily. Also it is ideal for persons with back, neck, shoulder and/or arm pain or those with a limited range of
15 motion such as the elderly. It may also be utilized when one's hands are dirty for the prevention of seatbelt soiling, or simply as a luxury device to make life easier. Lastly it is a reminder that the seatbelt has not been fastened because the handle is visible in the driver's peripheral vision.

SUMMARY OF THE INVENTION

20 This device is to be temporarily or permanently secured around the seatbelt by the user above the seatbelt shoulder buckle. The handle is designed to protrude forward from the retracted seatbelt allowing easier access to acquiring the seatbelt. This enables one's hand to grasp the seatbelt without having to reach

as far back as in conventional seatbelt arrangements. Once the handle has been grabbed it can be pulled across the chest just as a regular seatbelt normally would.

The design illustrated herein includes a base, two snaps, two holes, and a handle. The base is made of two parts, connected by a thin layer of material, acting as a hinge, so that it can be folded over the seatbelt. A laminant may be placed over the thin hinge so that it will not tear. Holes are located on the handle side of the base and the snaps are at the free end of the base. The snaps are cylindrical structures protruding from the base with a larger cylindrical structure at the distal end from the base allowing a secure fit with the holes. The handle is a cylindrical curved protrusion that tapers at the two ends so that it forms a smooth connection to the base. The securing of the seat belt attachment to the seat belt may be accomplished by multiple other means while remaining within the spirit of this invention.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is illustrated in the drawings in which like reference characters designate the same or similar parts throughout the figures of which:

FIG. 1 is a view of a seatbelt attachment 1 around an automobile seatbelt 2 according to one exemplary embodiment of the present invention.

FIG. 2 is an open view of the whole device prior to installation indicating the open base 3, knobs 4, holes 5, and the handle 6.

FIG. 3 is a schematic of the closed seatbelt attachment 1 viewed from the front.

FIG. 4 is a schematic of the closed seatbelt attachment 1 viewed from the back.

FIG. 5 is a view of the seatbelt device 1 with a logo on the back of the device.

DETAILED DESCRIPTION OF THE INVENTION

Ergonomic components in a vehicle are designed for the average body build to satisfy the majority of the population. The present seatbelt invention solves the problem of human joint pain and people that do not have an average
5 sized frame, others having experienced back, neck, shoulder, elbow and wrist surgery will also benefit from this invention.

The invention is a one-piece unit, easily applied to any ordinary retracted seatbelt above the male member of the seatbelt buckle located on the shoulder belt component. The handle part of the device is designed to project out towards the
10 windshield allowing the passenger or driver to grasp the seatbelt without reaching as far back.

The accompanying drawings lead to a detailed description of one exemplary embodiment of the present invention. FIG. 1 is an outside view of one exemplary embodiment of the invention around a seatbelt. The one-piece unit is
15 folded around the seatbelt so that the snap-like knobs are through the holes securing the device around the seatbelt. FIG. 2 illustrates an open inside view of the invention. FIG. 3 refers to the whole base which is to be folded in the middle to rap around the seatbelt. The knobs 4 are located at the distal end of the device in the open view. The knobs 4 are cylindrical protrusions that include a larger
20 cylindrical protrusion with smaller depth at the distal ends. The holes 5 go all the way through the base. The cylindrical sweep 6 represents the handle. Toward the distal end of the handle 6, at the base, a taper was created to flow from the handle into the base. FIG. 3 is an inside view of the closed seatbelt invention. FIG. 4 is

an outside view of the closed invention. Lastly FIG. 5 is an outside view of the seatbelt invention displaying a logo or advertisement. The knobs 4 have been inserted into the holes 5 and the device can be securely fastened to the seatbelt.

Many materials can be used to manufacture this device such as synthetic
5 rubber, thermoplastics, leather, vinyl, and cloth with manufacturing possibilities of die cutting and stitching. In one embodiment the device is made of ethylene methyl acrylate copolymers for its flexibility, durability, rigidity, and FDA approval and was injection molded. A logo has been applied using a hot foil stamp technique. Other ways of attaching a logo include silk screening, a sticker,
10 pad printing and molded in logo, other methods of applying a logo may be used per manufacturers discretion. Other design options included within this patent are different handle shapes as well as various types of attachment mechanisms depending on the car and seat configuration in which the device will be used. The following illustrations will show another shape of the device in illustrations 8-14.

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